

PATENT ABSTRACTS OF JAPAN

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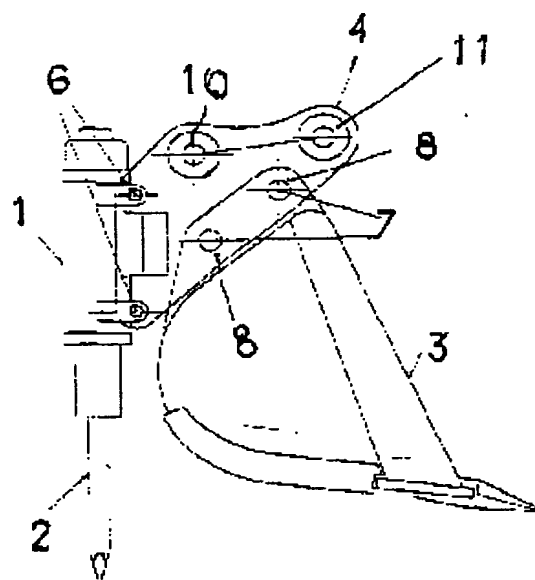
(72)Inventor : MARUYAMA MITSURU

(54) CIVIL ENGINEERING CONSTRUCTION MACHINE

(57)Abstract:

PROBLEM TO BE SOLVED: To provide a machine capable of achieving a work by a hydraulic breaker and a work by a bucket at the same time as required or carrying out separately.

SOLUTION: A bracket which is capable of making the hydraulic breaker and the bucket attachable or detachable with a fixing device such as a pin, bolt or the like is provided, and the hydraulic breaker and the bucket can be installed by the bracket, and also the hydraulic breaker alone or the bucket alone can be attached to the bracket if required.



LEGAL STATUS

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CLAIMS

[Claim(s)]

[Claim 1] The engineering-works machine which it had the bracket which becomes removable with fixing implements, such as a pin or a bolt, about a hydraulic breaker and a bucket, and could equip with the hydraulic breaker and the bucket with said bracket, and also was made as attachment to a bracket is [a hydraulic breaker independent or a bucket independent] possible.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Field of the Invention] This invention relates to the engineering-works machine to which the shovel which is applied to an engineering-works machine, especially dips up earth and sand, and the hydraulic breaker which protruded the chisel were related.

[0002]

[Description of the Prior Art] When excavation work of earth and sand is performed in the road etc. and a stone and the piece of concrete discharge by the location, it crushes by crushing by the chisel or making a breaker newly mobilize. Therefore, there is much time loss and it is non-efficiency.

[0003]

[Problem(s) to be Solved by the Invention] The technical problem of this invention is to offer the valuable engineering-works machine on the use which can carry out said two activities that it is simultaneous or separately if needed.

[0004]

[Means for Solving the Problem] The means of this invention is as follows.

[0005] It had the bucket and the combination bracket for installing both of a hydraulic breaker in an exception object respectively, and making said bucket and hydraulic breaker removable respectively, and the coexistence use of both could be carried out with the bracket of combination, and also independent use was enabled, respectively.

[0006]

[Embodiment of the Invention] (**) of drawing 2 -- (**) (Ha) is the exploded view of this invention, and the oil pressure breaker which 1 demounted the chisel 2 in this exploded view, and was attached possible, and 3 are buckets. It equips with a hydraulic breaker 1 and a bucket 3 removable using a bracket 4, and both are joined together, or it attaches separately, and enables it to have used it independently in this invention. Therefore, in the illustration example, it fixes with a bolt nut according to the attaching hole 8 which dug the attaching hole 7 which formed the mounting hole 6 for fixing to a hydraulic breaker 1 with a bolt in the mounting hole 5 of a bracket 4, and was formed in the bucket 3 to the bracket 4. In addition, the attaching holes 10 and 11 independently formed in the bracket 4 are fixed to the body of an engineering-works machine (drawing is omitted) with a bolt nut. That is, a hydraulic breaker 1 and a bucket 3 are attached in the body of an engineering-works machine through a bracket 4.

[0007]

[Effect of the Invention] While doing an operation of ***** by the chisel etc., and an earth-and-sand **** activity with a bucket 3, attaching a hydraulic breaker 1 and a bucket 3 with a chisel in a bracket 4 according to this invention as shown in drawing 1 If it will only work by being based on a bucket like drawing 3 and scooping up if a chisel is demounted (refer to drawing 4), and a bucket is demounted An activity is possible with a hydraulic breaker with the chisel shown in drawing 5 , and a chisel can be prepared like before or it can work very quickly by not making a breaker mobilize.

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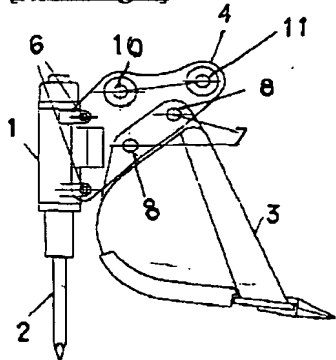
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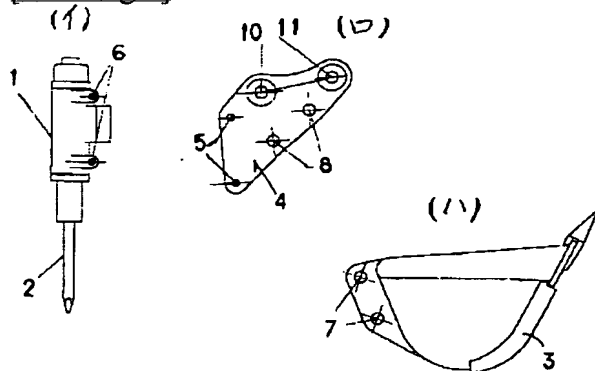
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DRAWINGS

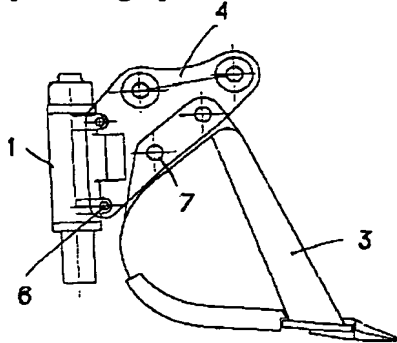
[Drawing 1]



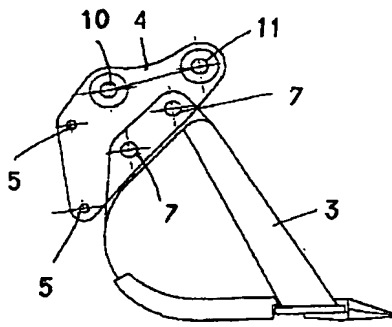
[Drawing 2]



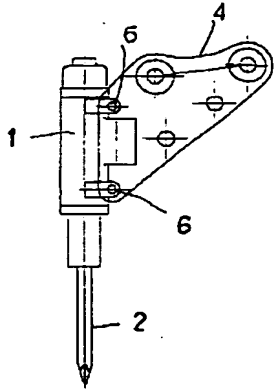
[Drawing 3]



[Drawing 4]



[Drawing 5]



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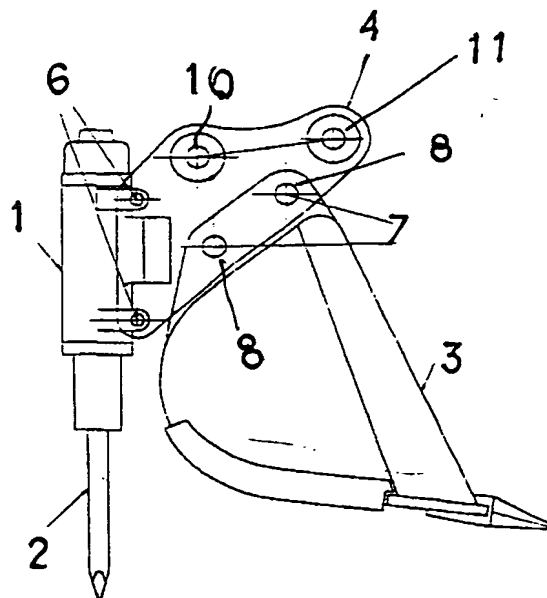
Fターム(参考) 2D012 DA01 GC00 HA00

(54)【発明の名称】 土木機械

(57)【要約】

【課題】 油圧ブレーカによる作業と、バケットによる作業を必要に応じて同時に又は別個に遂行できるものを提供すること。

【解決手段】 油圧ブレーカとバケットを、ピン又はボルト等の固着具により着脱可能となるブラケットを備え、油圧ブレーカとバケットを前記ブラケットにより装着できるほか、油圧ブレーカ単独或いはバケット単独でブラケットに取付可能としたこと。



【特許請求の範囲】

【請求項 1】 油圧ブレーカとバケットを、ピン又はボルト等の固着具により着脱可能となるブラケットを備え、油圧ブレーカとバケットを前記ブラケットにより装着できるほか、油圧ブレーカ単独或いはバケット単独でブラケットに取付可能となした土木機械。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は土木機械に係り、特に土砂を掘り取るショベルと、チゼルを突設した油圧ブレーカとを関連させた土木機械に関するものである。

【0002】

【従来の技術】道路等で土砂の掘削作業を行う場合、場所により、石やコンクリート片が排出した時は、たがねによって破碎したり、ブレーカを新たに出勤させ、破碎を行う。従って時間的損失が多く、非効率である。

【0003】

【発明が解決しようとする課題】本発明の課題は、前記 2つの作業を必要に応じて同時に又は別々に遂行できる利用上の価値ある土木機械を提供することにある。

【0004】

【課題を解決するための手段】本発明の手段は次のとおりである。

【0005】バケットと、油圧ブレーカの両者を各々別体に設置し、前記バケットと油圧ブレーカを各々着脱可能にするための兼用ブラケットを備え、兼用のブラケットによって両者を共存使用できるほか、それぞれ単独利用を可能にしたこと。

【0006】

【発明の実施の形態】図 2 の (イ) (ロ) (ハ) は本発明の分解図で、この分解図において 1 はチゼル 2 を取外し可能に取付けた油圧ブレーカ、3 はバケットである。本発明においては、油圧ブレーカ 1 とバケット 3 とをブラケット 4 を用いて、着脱可能に装着し、両者を一緒に *

* 接合したり又は別々に取付けて、単独で使えるようにしてある。そのため図示実施例では油圧ブレーカ 1 にブラケット 4 の取付け穴 5 にボルトで固定するための取付け穴 6 を形成しバケット 3 に形成した取付け穴 7 をブラケット 4 に穿った取付け穴 8 に合わせてボルトナットで固定する。尚ブラケット 4 に別に形成した取付け穴 10、11 は土木機械本体（図は省略）にボルトナットで固定する。即ち、ブラケット 4 を介して土木機械本体に油圧ブレーカ 1 とバケット 3 を取付ける。

【0007】

【発明の効果】本発明によれば図 1 に示すようにチゼル付きの油圧ブレーカ 1 とバケット 3 をブラケット 4 に取付けたままでチゼルによる石砕き等の作用とバケット 3 による土砂掘り作業とを行うと共に、チゼルを取外せば、図 3 のようにバケットによる掘り作業のみを行ない（図 4 参照）、またバケットを取外せば、図 5 に示すチゼルのある油圧ブレーカのみにより作業ができ、従来のようにたがねを用意したり、ブレーカを出勤させる必要がなく作業を頗る迅速に行うことができる。

【図面の簡単な説明】

【図 1】側面図。

【図 2】分解図。

【図 3】チゼルのみを取外した状態の側面図。

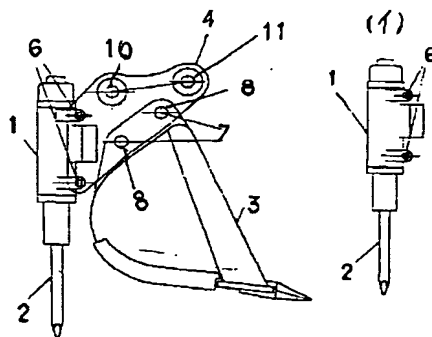
【図 4】油圧ブレーカを取外してバケットのみを使用する状態を示す側面図。

【図 5】バケットを取外してチゼル付きの油圧ブレーカのみを使用する状態を示す側面図。

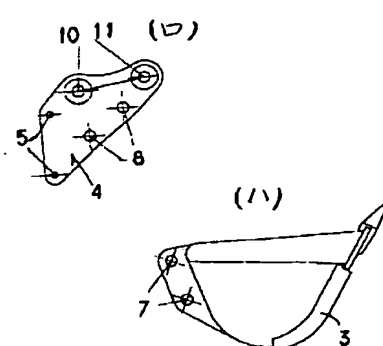
【符号の説明】

- | | |
|------------|--------|
| 1 | 油圧ブレーカ |
| 2 | チゼル |
| 3 | バケット |
| 4 | ブラケット |
| 5, 6, 7, 8 | 取付け穴 |

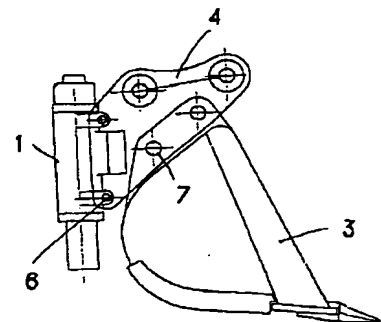
【図 1】



【図 2】



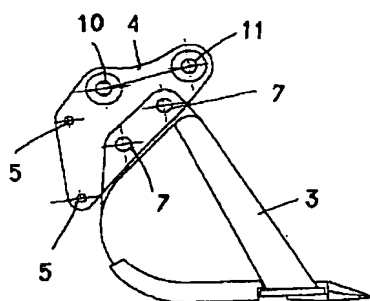
【図 3】



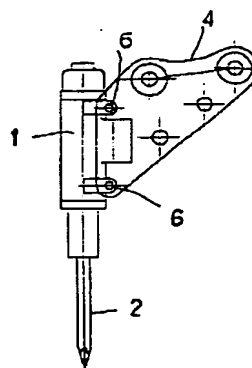
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特開2003-213720

【図4】



【図5】



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